

December 31, 1979

Diamond Head

Michael V. Polito
Emergency Response & Hazardous Materials Inspection Branch

Richard Weinstein, Attorney
Water Enforcement Branch

THRU: Fred N. Rubel, Chief
Emergency Response & Hazardous Materials Inspection Branch

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As per my memo of November 26, 1979 and as per the direction given to Mr. D. Martin, Attorney, Newton Refining, at our joint meeting please be advised that as of November 26, 1979 the spill prevention and cleanup devices required by me as on scene coordinator have not been acted upon add/or maintained. Attached is Mr. Burger's report which addresses these failings.

Please prioritize actions on this facility and advise me of the actions the company will or will not take. As you know, the issues involved are complicated and are in litigation. We, the federal government, are somewhere in the middle. If any additional enforcement actions are necessary, please let me know.

Attachment

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ecology and environment, inc.

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12/26/79

DATE: November 27, 1979

SUBJECT: Report of findings, second inspection of in-situ emergency oil-water separation system at Diamondhead Refining Co., Inc., Kearny, N.J.

FROM: John R. Burger *JB*
TAT II, Edison, N.J.

TO: Michael V. Polito, Chemist
ER & HWI Branch
US EPA, Edison, N.J.

THRU: Fred N. Rubel, Chief *FR*
ER & HWI Branch
US EPA, Edison, N.J.

The Diamondhead Refining Co., Inc., separator system and environs were inspected, as per M. Polito's 11/14/79 memo request, between 1430 and 1500 hours on November 26, 1979. SX-70 photos were taken and are attached. Findings are summarized below:

OBSERVATIONS

1. Weather: intermittent showers, heavy at times, gusty S-SE winds, (rainfall in Central Jersey had begun around 0900 hours)
2. Diamondhead Runoff: No sheen observed in influent to separator. (Flow approximately 20-40 liters/min (5-10 gpm))
3. Separator: No evidence of flooding. Wind had accumulated oily froth at inlet end of separator (volume approximately 250 ml, see photo). First chamber non-existent. Erosion around both sides of filter fence could result in by-pass of media and discharge of accumulated oil if 180° wind change occurred. Water behind filter fence and flowing over outfall wier was free of oily sheen.
4. Receiving Ditch: Approximately 60 liters (16 gallons) of emulsified oil and oil-soaked debris had accumulated at the northern terminus of the drainage ditch. As the photos indicate, the source of this oil was not Diamondhead's discharge, but from the oily leachate and oil-soaked solids originating in the fill surrounding and below the ditch.

SUMMARY

Conditions at the site on November 26, 1979, strongly suggest that the principal source of oil contamination is not presently from Diamondhead runoff, but originates on what is now state-owned lands. Although up-grading the separator as per my November 6 letter would

improve efficiency, this action would not eliminate the continuing oil seepage into the ditch. This inspection confirmed N.J.D.O.T. Resident Engineer, Mr. Steinberg's, suspicions of continuing problems with the oily fill. His suggestions for containment and collection systems at one or more locations within the Interstate 280 interchange drainage system, before these flows enter surrounding drainage systems or creeks, are well-taken and should be pursued.

Note: Enclosed with this report are copies of the overall utility plan (storm sewer relocation) drawing #447 and a plan sheet (Section 8A), drawing 36, provided by Mr. Steinberg. There prints can be included in the EPA file.

> see main file

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Photo I. Inlet to Separator. Note emulsified, floating oil accumulated downwind.



Photo II. Location of "First Chamber". Note absence of baffle or earth partition, short-circuiting to filter fence.



Photo III. Water surface behind filter fence. Note absence of oily sheen.



Photo IV. Overall view of separator. Note by-pass around filter fence. (Due to poor lighting, no tripod, close-up shots of separator were too blurry to be of value.)



Photo V



Photo VI



Photo VII.

Photos V, VI, and VII. Downwind accumulation of oily emulsion and debris. Note the movement of oily sheen from discrete particles of floating oily solids carried into accumulation by gusty winds.